

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Currently Amended) A method for isolating a power line distribution comprising at least one branch power line having a power conductor, and a neutral conductor to aid in fault detection, and at least one branching point where the branch power line is coupled to a main power line in the power line distribution, the method comprising the steps of:

identifying the at least one ~~segmentation~~-branching point in the power line distribution;
and

coupling an impedance device to at least one of the neutral conductor or the power conductor of the branch power line proximate to ~~at the at least one segmentation-branching~~ point to isolate the ~~segment of the branch in the~~ power line distribution; and

coupling a fault recorder to the main power line to detect a fault in the main power line.

2. (Previously Presented) A method according to claim 1, wherein the step of coupling the impedance device to the at least one of the neutral conductor or the power conductor includes inserting an inductor in series with the at least one of the neutral conductor or the power conductor.

3. (Previously Presented) A method according to claim 2, wherein the step of inserting the inductor in series with the at least one of the neutral conductor or the power conductor includes the step of inserting the inductor in series with the neutral conductor proximate to a connection between the neutral conductor and a connection to earth ground.

4. (Previously Presented) A method according to claim 1, wherein the step of coupling the impedance device to the at least one of the neutral conductor or the power conductor includes coupling a ferrite element concentric with the at least one of the neutral conductor or the power conductor.

5. (Currently Amended) A method according to claim 4, wherein the step of coupling the ferrite element concentric with the at least one of the neutral conductor or the power conductor further includes the step of coupling ~~the a further~~ ferrite element around the neutral conductor proximate to a connection between the neutral conductor and earth ground.

6. (Canceled)

7. (Canceled)

8. (Previously Presented) A method according to claim 1, wherein the power line distribution is an underground power line distribution and the step of coupling the impedance device to the at least one of the neutral conductor or the power conductor includes the step of coupling the impedance device to the at least one of the neutral conductor or the power conductor proximate to a connection between the power line distribution and an underground feed point.

9. (Previously Presented) A method according to claim 1, wherein the step of coupling the impedance device to the at least one of the neutral conductor or the power conductor includes the step of coupling a reactor in series with the power conductor.

10. (Previously Presented) A method according to claim 1, wherein the step of coupling the impedance device to the at least one of the neutral conductor or the power conductor includes the step of coupling the impedance device that exhibits relatively high impedance in the frequency range of 10 KHz to 1MHz and exhibits relatively low impedance in a frequency range less than 100 Hz.

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Canceled)

15. (Canceled)

16. (Previously Presented) A power distribution system including a power conductor and a neutral conductor including a main section and at least one branch section that connects to the main section at at least one branching point, the power distribution system comprising:

at least one impedance element coupled to the at least one branch section proximate to the at least one branching point;

a plurality of fault distance indicators the fault distance indicators being coupled to the main section and to the at least one branch section, respectively.

17. (Previously Presented) A power distribution system according to claim 16, wherein the at least one impedance element includes at least one inductor connected in series with the at least one of the neutral conductor or the power conductor.

18. (Currently Amended) A power distribution system according to claim 17, wherein the at least one inductor includes a further inductor which is coupled to the neutral conductor proximate to a connection between the neutral conductor and earth ground.

19. (Previously Presented) A power distribution system according to claim 16, wherein the at least one impedance element includes at least one ferrite element concentric with the at least one of the neutral conductor or the power conductor.

20. (Currently Amended) A power distribution system according to claim 19, wherein the at least one ferrite element includes a further ferrite element which is coupled to the neutral connector proximate to a connection between the neutral conductor and earth ground.